

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 10/795,830 Confirmation No.: 2799

Applicant : James E. Grimm et al.

Filed : March 8, 2004

Title : NAVIGATED ORTHOPAEDIC GUIDE AND METHOD

TC/A.U. : 3733

Examiner : Michael B. Priddy

Docket No. : ZIM0417 (ZM0618)

Customer No. : 43963

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

## <u>DECLARATION UNDER 37 C.F.R. § 1.131</u> OF JAMES E. GRIMM AND SHAWN E. MCGINLEY

We, James E. Grimm and Shawn E. McGinley, inventors of the invention disclosed and claimed in Claims 2-4, 8-10, 15-19, 21-23 and 25-26 of the above-identified patent application, hereby declare as follows:

- That the Examiner in U.S. Patent Application Serial No. 10/795,830 (hereinafter "the present application") rejected Claims 2-4, 8-10, 15-19, 21, 23 and 25 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Application Publication No. 2004/0039396 to Couture et al. (hereinafter "Couture et al. '396").
- 2. That Couture et al. '396 was filed on February 4, 2003 and claims priority to U.S. Provisional Patent Application No. 60/405,326, filed on August 23, 2002.
- 3. That prior to August 23, 2002, we constructed and used a surgical instrument in the United States of America in accordance with the claims of the present application. Figure A attached hereto is a picture taken prior to August 23, 2002, of an exemplary embodiment device constructed prior to August 23, 2002, which generally corresponds to Figures 1-3 of U.S. Patent Application Serial No. 10/325,088, from which the present application claims priority and Figure B attached hereto is a model representation created prior to August 23, 2002, of an exemplary embodiment device

> constructed prior to August 23, 2002, which generally corresponds to Figures 4 and 5 of U.S. Patent Application Serial No. 10/325,088, from which the present application claims priority. Figures C1-C3 are pictures of an exemplary embodiment device corresponding to a device constructed prior to August 23, 2002 and which generally correspond to Figures 1-3 and 7 of U.S. Patent Application Serial No. 10/325,088, from which the present application claims priority. Appendix D1-D3 attached hereto is a claim chart correlating Claims 2-4, 8-10, 15-19, 21-23 and 25-26 to Figures A, B and C1-C13. Referring to Figures A, B and C1-C13, an exemplary surgical system for use during an orthopaedic surgical procedure is shown in accordance with the pending claims of the present application. The device shown in Figures A, B and C1-C13 attached hereto was constructed and used with a surgical navigation system including means for tracking the position of an object during a surgical procedure, comprising multiple sensors to detect and triangulate the position of the orthopaedic guide. Referring specifically to Figure B, means for being tracked by the surgical navigation system to guide positioning of the orthopaedic guide is shown. The device shown in Figure B may be equipped with any reference element technology, such as optical tracking technology, radiofrequency tracking technology, and electromagnetic tracking technology, for example. Moreover, the device shown in Figure B is mountable to the instrument body shown in Figure A and Figures C1-C5 (identified with reference numeral 10).

4. That the surgical instrument constructed in accordance with the claims of the present application operated according to its intended purpose prior to August 23, 2002.

5. We hereby declare that all statements made herein of our own knowledge are true, and that all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful false statements, and the like so made are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the present application or any patent issuing thereon.

Date: MARCh 28, 2008

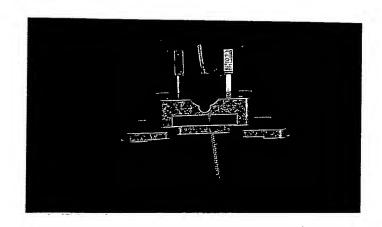
James F. Grimn

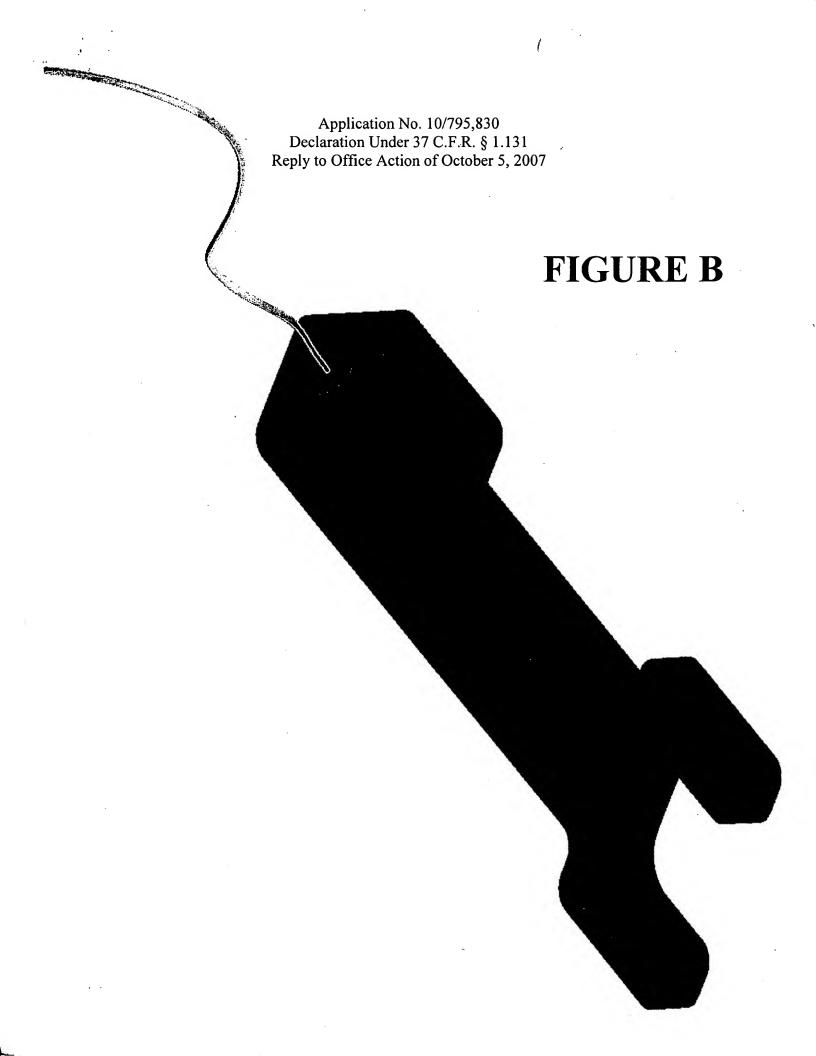
Date: MARCH 28, 2008

Shawn E. McGinley

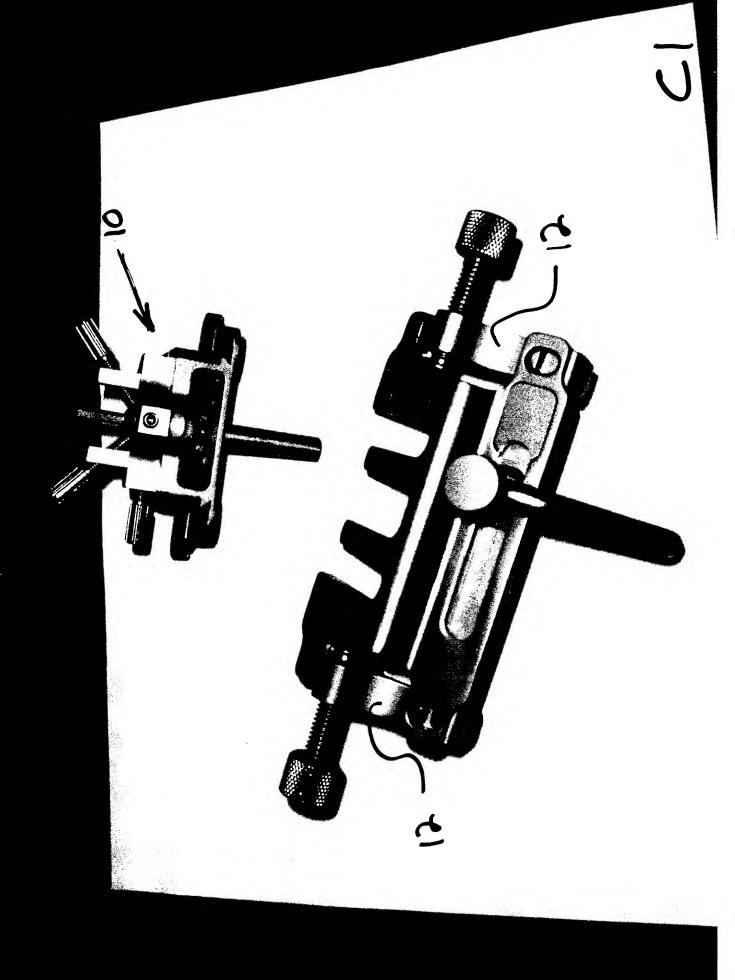


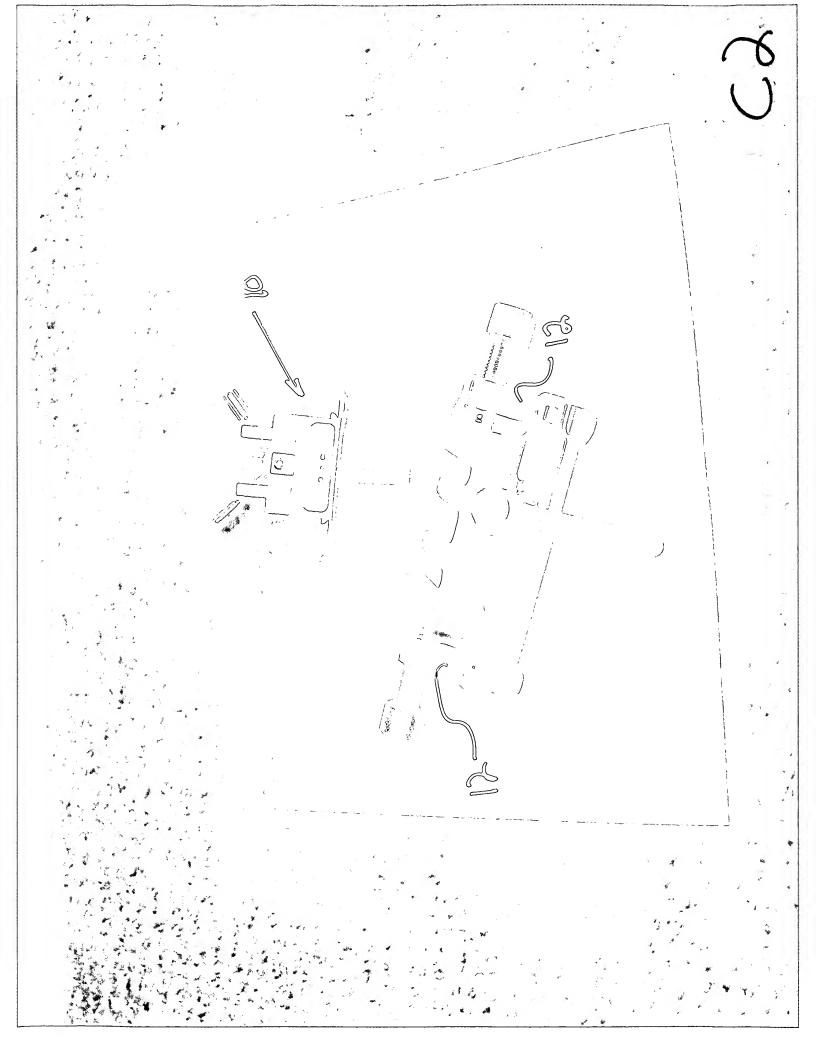
## FIGURE A

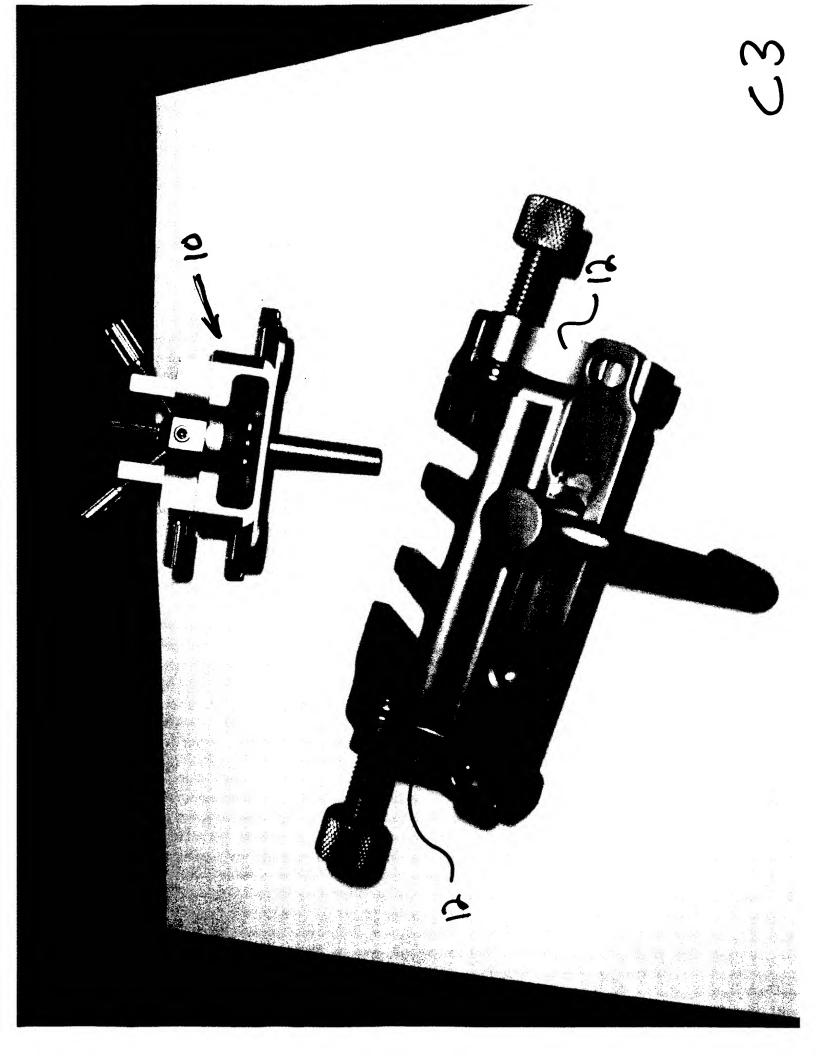




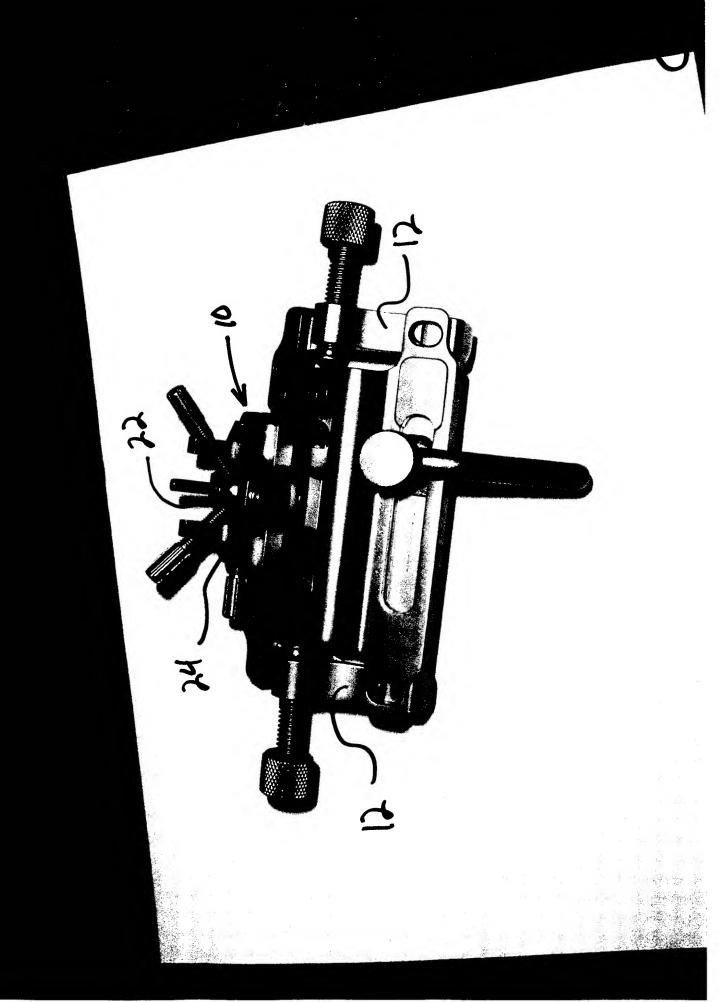
C1 - C13

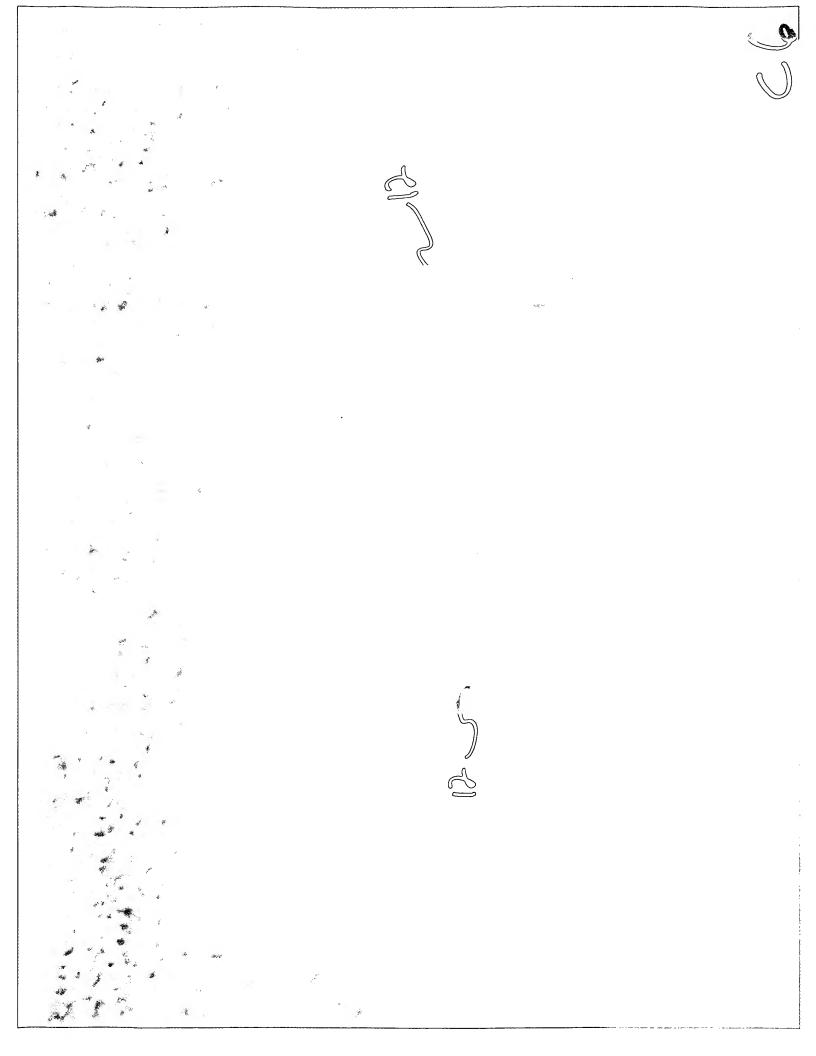


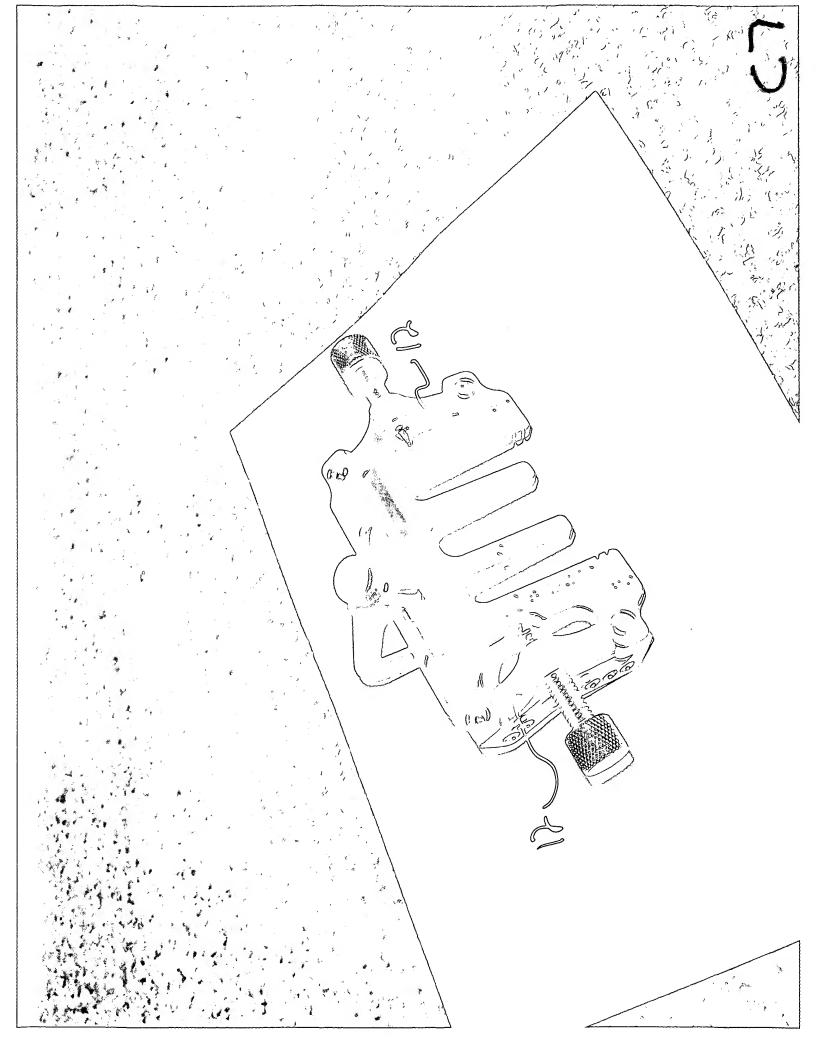




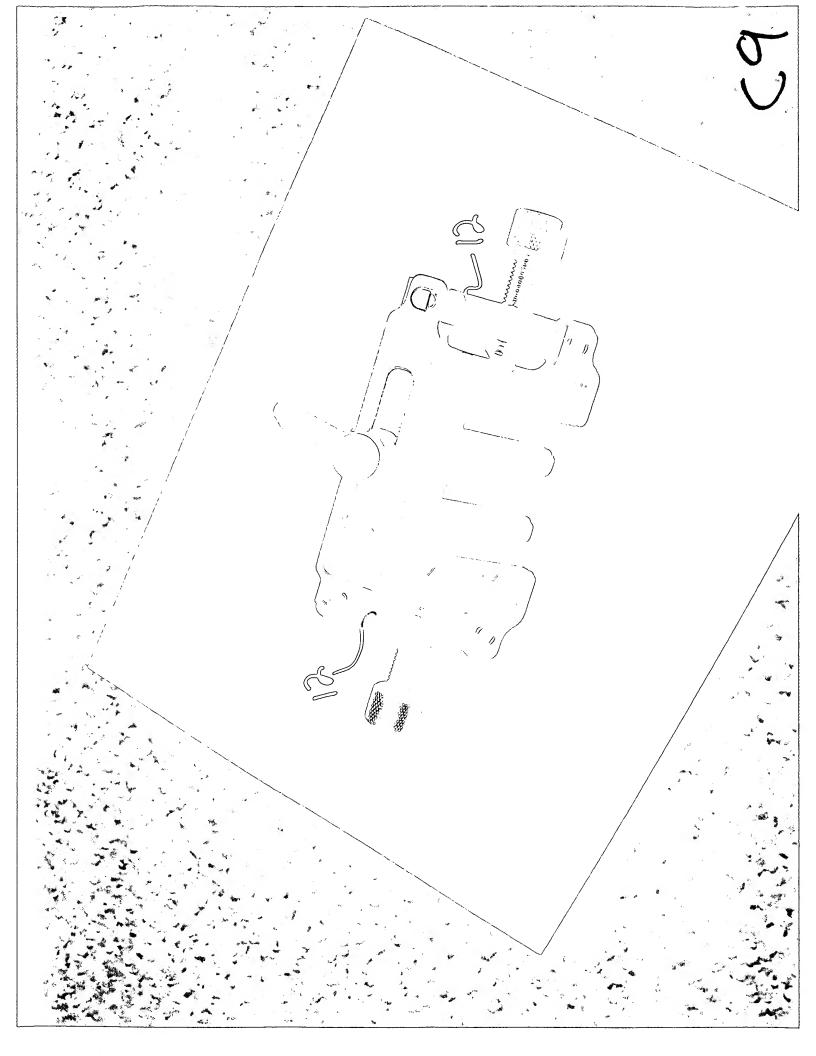


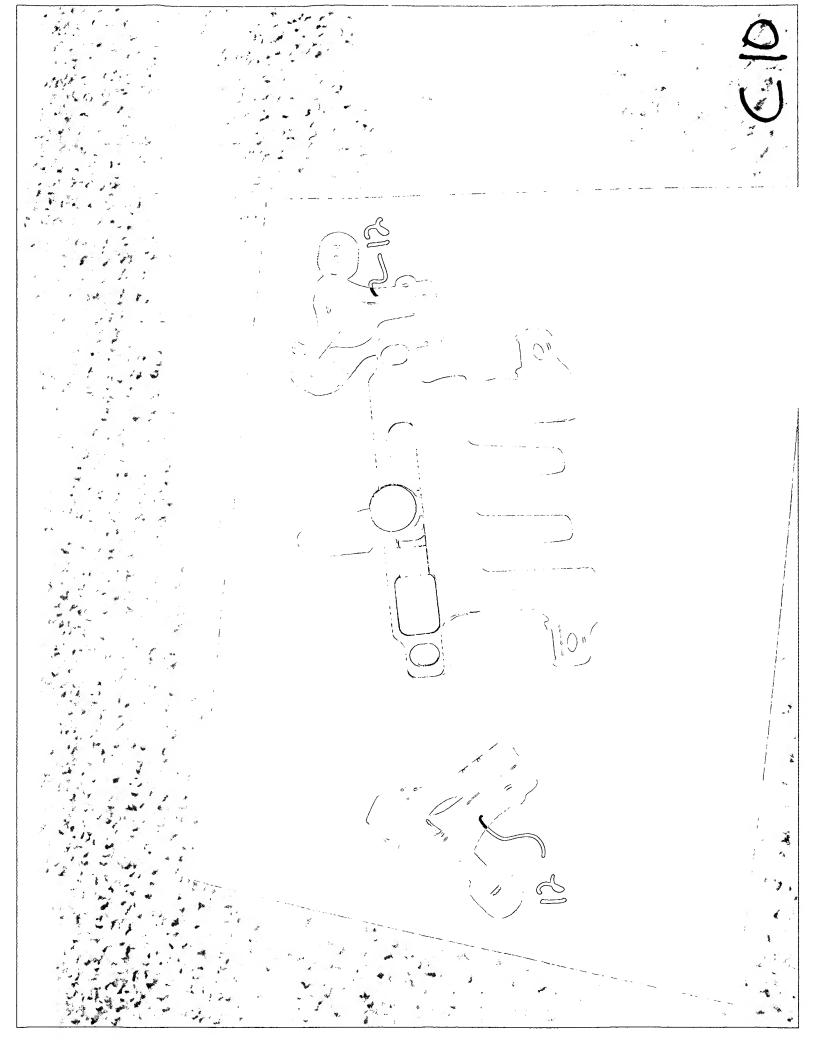


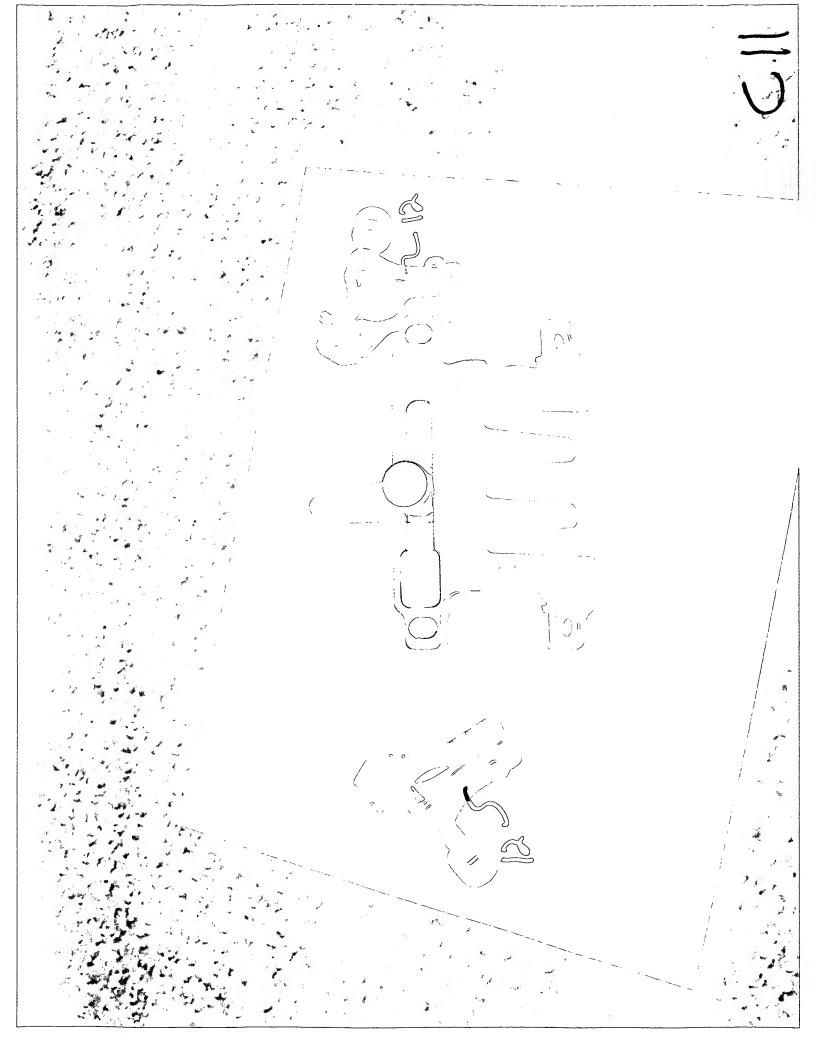


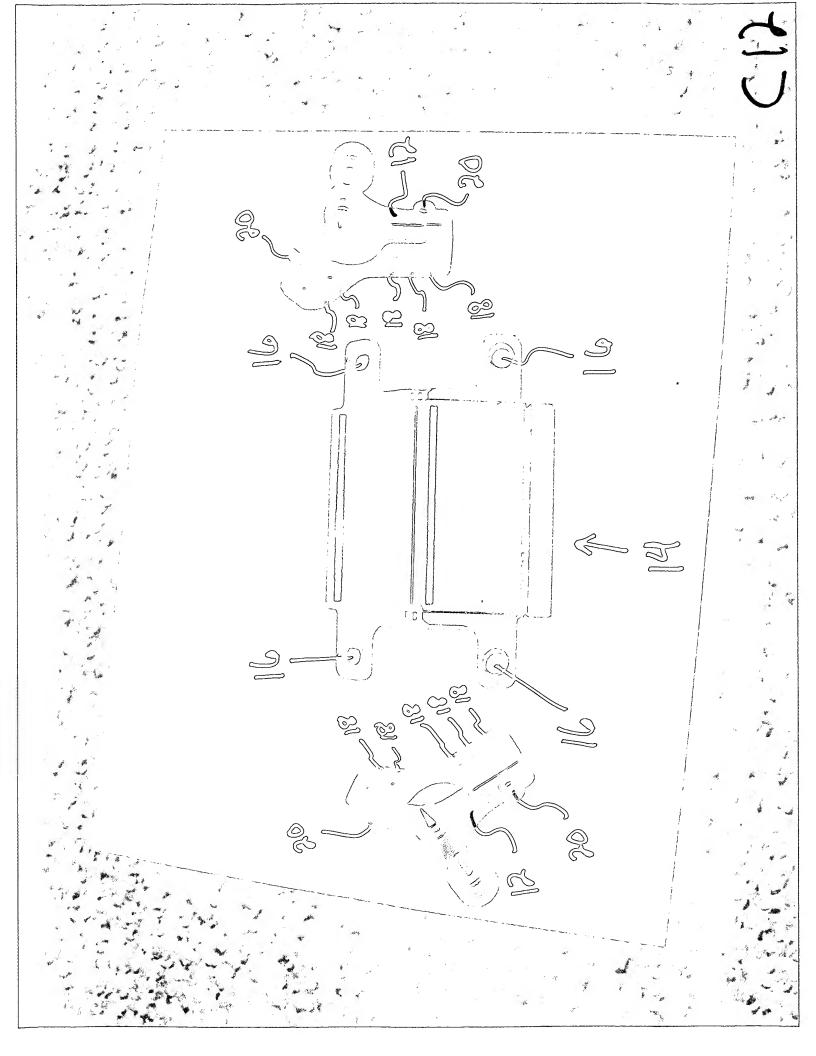


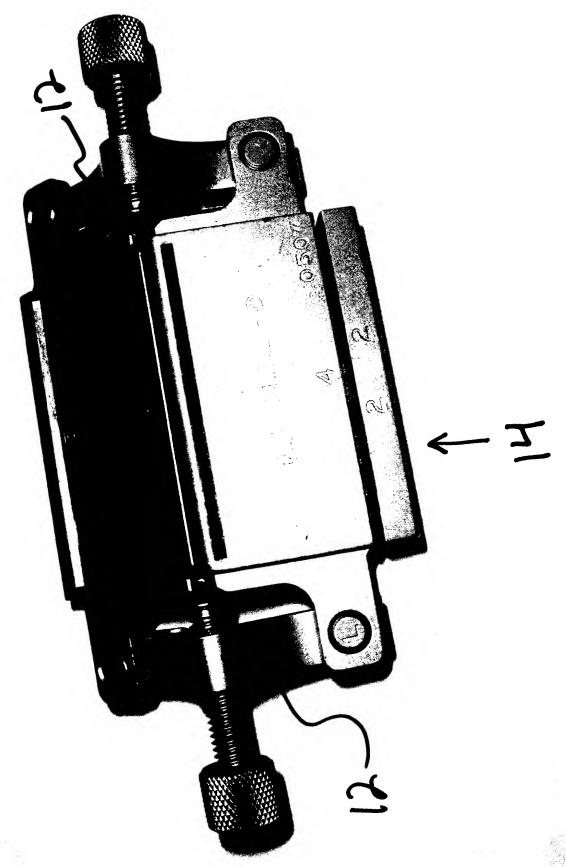












## D1 - D3



NAVIGATED ORTHOPAEDIC GUIDE AND METHOD		
ZIM0417		
CLAIMS OF 10/795,830	f	
2. The surgical system of claim 15 wherein the	means for establishing a datum (12)	
means for establishing a datum comprises		
means for establishing one or more datums		
relative to the surgical site selected from the		
list consisting of pins, screws, bars, fins, rails,		
dovetails, planar surfaces, holes, slots, and/or notches.		
3. The surgical system of claim 15 wherein the	means for establishing a datum (12) is separate	
means for establishing a datum comprises	from guide (14)	
means for establishing an intermediate datum	inom gaide (14)	
separate from the guide itself.		
4. The surgical system of claim 15 wherein the	means for establishing a datum (12)	
means for establishing a datum comprises a	comprising holes (18)	
guide body including a plurality of holes		
through the body for guiding the placement of		
pins relative to the surgical site.		
8. The surgical system of claim 15 wherein the	base member 22 and datum guide member 24	
means for establishing a datum includes a base		
member and a datum guide member connected		
to the base member such that the position of		
the datum guide member is adjustable relative		
to the base member to a desired datum guide		
member position as indicated by the surgical		
navigation system.		
9. The surgical system of claim 8 wherein the	base member 22 and datum guide member 24	
base member is able to be secured to a distal		
portion of a femur and the datum guide		
member is adjustable relative to the base		
member to establish a datum having desired		
flexion-extension and varus-valgus angles as		
indicated by the surgical navigation system.	haraman and a 22 and datum could manhar 24	
10. The surgical system of claim 8 wherein the base member is able to be secured to a	base member 22 and datum guide member 24	
proximal portion of a tibia and the datum guide		
member is adjustable relative to the base		
member to establish a datum having desired		
posterior slope and varus-valgus angles as		
indicated by the surgical navigation system.		
15. A surgical system for use during an		
orthopaedic surgical procedure at a surgical		
site of a patient's body, the system comprising:		
a surgical navigation system including means	see 131 declaration paragraph 3.	

	I
for tracking the position of an object during a	
surgical procedure;	
a navigated orthopaedic guide including means	navigated orthopaedic guide (10) including
for being tracked by the surgical navigation	means for being tracked by the surgical
system to guide positioning of the orthopaedic	navigation system (Figure B) the
guide at a desired position relative to the	orthopaedic guide including means for
surgical site, the orthopaedic guide including	establishing a datum at a desired position
means for establishing a datum at a desired	relative to the surgical site (12)
position relative to the surgical site; and	1011112   0 0 0110 2011 <b>g</b> 10111 (==)
a surgical component including means for	surgical component (14) including means (16 –
engaging the datum positioned by the	see Figure C12) for engaging the datum (12)
orthopaedic guide to locate the surgical	positioned by the orthopaedic guide to locate
component at a desired position relative to the	the surgical component at a desired position
	1 -
surgical site.	relative to the surgical site
16. The system of claim 15 wherein the means	see 131 declaration paragraph 3
for tracking comprises multiple sensors to	
detect and triangulate the position of the	
orthopaedic guide.	121 1 1 1 1 1 2
17. The system of claim 15 wherein the means	see 131 declaration paragraph 3
for being tracked comprises an electromagnetic	
coil attached to the orthopaedic guide, the	
electromagnetic coil producing a signal	
detectable by the means for tracking.	
18. The system of claim 15 wherein the means	drill guides (18)
for establishing a datum comprises a drill guide	
to guide a drill in forming a hole in a bone at	
the surgical site	
19. The system of claim 15 wherein the means	means for establishing a datum (12)
for establishing a datum comprises at least one	comprising holes (18)
hole in the orthopaedic guide to guide	
placement of a pin adjacent the surgical site.	
21. The system of claim 15 wherein the	surgical component (14) comprises a cut guide
surgical component comprises a cut guide to	having cut slots
guide a cutter to cut a bone to receive an	_
implant.	
22. The system of claim 21 wherein the cut	surgical component (14) comprises a femoral
guide comprises a femoral finishing guide	finishing guide including guides for guiding a
including guides for guiding a saw blade to	saw blade to shape the end of a femoral bone
shape the end of a femoral bone to receive a	to receive a femoral knee implant
femoral knee implant.	
23. The system of claim 21 wherein the cut	surgical component (14) comprises a distal
guide comprises a distal femoral cut guide.	femoral cut guide
25. The system of claim 15 wherein the means	means for engaging the datum (12) comprises
for engaging the datum comprises at least one	at least one hole (16 – see Figure C12) formed
hole formed in the surgical component to	in surgical component (14) to receive datum

19 \$15 B. K.

receive the datum in the form of a pin.	pins 20
26. The system of claim 15 wherein the means	means for establishing a datum (12) directly
for establishing a datum directly engages the	engages guide (14)
subsequent surgical component.	